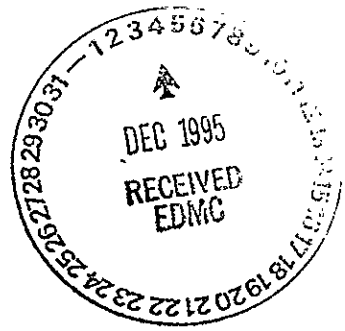
Balancing Historic Preservation Needs with the Operation of Highly Technical or Scientific Facilities

A report to the
U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
SUBCOMMITTEE ON NATIONAL PARKS AND PUBLIC LANDS, and the
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY



Advisory Council on Historic Preservation

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Executive Summary

IN RESPONSE TO A JOINT REQUEST FROM THE HOUSE Committee on Interior and Insular Affairs, Subcommittee on National Parks and Public Lands, and the House Committee on Science, Space, and Technology, the Advisory Council on Historic Preservation undertook an analysis of preservation issues concerning Federal support for highly scientific and technical facilities. The analysis considered the appropriate role of historic preservation in decisionmaking about the operation and management of these facilities.

When future generations reflect upon the most significant historic resources of the late 20th century, the sites associated with man's first ventures into space, with the splitting of the atom, with the development of computers and artificial intelligence, and with the first successful products of genetic engineering, may well be the first examples that spring to mind. America's scientific and technical facilities stand as monuments to the Nation's supreme ability to invent and exploit new technology and to advance scientific and engineering knowledge. Some facilities and structures significant in the early history of science and technology are now inactive or have been deemed obsolete; they are in danger of being lost to future generations through lack of adequate maintenance or complete neglect.

This analysis responds to concerns on the part of the scientific community that efforts to preserve or protect historic scientific and technological resources through compliance with Federal historic preservation law might impede efforts to stay at the forefront of international research and achievement. Many of the facilities and much of the equipment associated with scientific or engineering advancements remain in active use today, but need to be continuously upgraded and modified to stay at the cutting edge of technology. Managers and scientists fear that excessive delays, costs, or the modification or "veto" of plans for new technological facilities would inevitably result from compliance with the National Historic Preservation Act (NHPA). In addition, private institutions receiving Federal support through research grants have pointed out that such compliance would impose a burden on them to bear these monetary and other costs as a condition for receiving research funds.

Given the late-20th-century's pattern of rapid technological change, however, the protection of the physical environment that facilitated that change takes on increased importance. Federal agencies managing or assisting scientific research have a leadership role in the stewardship of historic properties under NHPA. They are obligated to present and future generations, whose tax dollars will continue to fund their operations, to consider the effects of their actions on the historic values embodied in select facilities.

The central issue discussed in this report is how organizations whose primary missions involve active research and highly technical operations can meet their obligations as stewards of the nation's historic scientific resources, given their continuous need to modify or replace "historic" facilities and equipment. What is the appropriate balance between an agency's primary scientific and technical mission and historic preservation? How can this balance be achieved effectively and efficiently, and how can attendant costs be minimized?

The number of properties formally recognized as significant for historic scientific and technological achievements currently is fairly small. The vast majority of scientific research activities is unlikely to affect historic properties through destroying or altering their historic characteristics. Most Federal funding is used for purchasing equipment and computer time and paying staff salaries. A small minority of such activities, however, does have the potential to affect historic properties. Certainly long-term operation and management of active facilities can result in significant alterations. Further, the number of

historically significant scientific properties is likely to increase in the near future as the era of World War II and its aftermath recede further into the past.

The findings and recommendations contained in this report are based on field visits to numerous affected facilities, as well as meetings with scientists, engineers, historians, facility managers, museum curators, and preservation professionals; solicitation of public comments; review of past Section 106 cases and existing agency programs; and review of National Park Service research for the preparation of two relevant National Historic Landmark theme studies.

The analysis finds in brief that:

- ☐ The assumption that the NHPA is fine for the majority of Federal activities, but inappropriate for scientific research and development, must be rejected. Other Federal programs meeting national priorities must take into account historic preservation, just as they must minimize natural environmental degradation and ensure equal employment opportunity. There is validity, however, to the view that because of the nature of the scientific research process, a special effort should be made toward maintaining flexibility in the planning and execution of research work and meeting the time constraints of priority programs.
- ☐ Federal agencies engaged in scientific research should better acknowledge and meet their obligations as stewards of the national scientific heritage and strengthen their commitment to the preservation of that legacy.
- ☐ The historic preservation community has characteristically displayed unfamiliarity with the technical characteristics of historically significant properties of a scientific or technical nature, and the needs of active scientific research and engineering.
- ☐ The scientific community has typically displayed unfamiliarity with the requirements of NHPA and the interests of the historic preservation community.
- ☐ With better communication, education, and cooperation among all parties, and with some clear understandings on funding and time constraints facing all parties, the Council's regulations and the Section 106 review process are flexible enough to accommodate the needs of both scientific research and technology operations and historic preservation.

Highlights of the recommendations:

- *Congress should reaffirm the national commitment to historic preservation by upholding the existing national historic preservation program and rejecting individual program or project requests for legislative waivers of historic preservation statutes.*
- *Future scientific achievement, as well as an adequate serving of the public interest, depends on an understanding of past scientific successes and failures. To the extent that they do not already, future authorizations for major scientific and technological programs should include public education components focusing in part on the communication of the relevant history of science.*
- *Decisions about projects that may affect historic properties need to be made with as complete an understanding as possible of such effects. However, considerations of preservation options should be kept distinct from the peer review process of awarding research grants and the determination of research priorities central to the scientific research process.*

- *The Advisory Council on Historic Preservation and affected Federal agencies should jointly subscribe to a statement of policy that acknowledges the sensitive relationship between scientific research and the evolving history of science and its physical manifestations.*

- *Over the next two years, affected Federal agencies, in cooperation with the Advisory Council on Historic Preservation, should examine current administrative procedures for historic preservation. This should include evaluating existing mechanisms for meeting responsibilities for NHLs and other properties eligible for or listed on the National Register of Historic Places. As part of this process, affected Federal agencies should determine how they might better coordinate historic preservation programs and planning among facilities managers, public affairs offices, archivists, historians, external affairs offices, and other staff. The Council should recommend measures to these agencies to improve the effectiveness, consistency, and coordination of those procedures with the purposes of NHPA as prescribed by Section 202(a)(6).*

- *Innovative ways for minimizing and meeting the costs of historic preservation that may be associated with the operation and management of historic facilities must be explored by Federal agencies, in cooperation with other concerned parties.*

- *The Advisory Council on Historic Preservation, in cooperation with the Smithsonian Institution and NPS, should foster better communication between the preservation and museum communities and Federal agencies, with the aim of establishing a consensus about what kinds of facilities and objects should be physically preserved for the future. This would include deciding how the historic value of facilities and objects should be determined, and which of these could be "preserved" through documentation. Most probably that option would be best suited to historic facilities that remain active today.*